

**DIRECT TESTIMONY OF
JOHN S. BEIER
ON BEHALF OF
CAROLINA GAS TRANSMISSION CORPORATION
F/K/A SOUTH CAROLINA PIPELINE CORPORATION
DOCKET NO. 2007-6-G**

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Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is John S. Beier. My office is located at 1426 Main Street, Columbia, South Carolina, and I am the Gas Analyst who was responsible for the administration of the hedging program of South Carolina Pipeline Corporation ("SCPC" or "Company") during the period under review, January 1, 2006 through October 31, 2006 ("Review Period").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. I am a 1992 graduate of the University of South Carolina, where I received a Bachelor of Science Degree in Accounting. Following graduation, I worked for a year and a half in public accounting with the CPA firm C.C. McGregor and Company. I am a licensed Certified Public Accountant in the State of South Carolina and am currently a member of the American Institute of Certified Public Accountants and the South Carolina Association of Certified Public Accountants.

In January 1994, I joined SCANA Energy Marketing's Financial Accounting Department. The following fall I began working with SCANA Energy Marketing's Director of Risk Management in hedging the natural gas reserves for SCANA's unregulated oil and gas subsidiary. In the summer of 1995, I accepted the position of

1 Risk Management Analyst for SCPC and conducted the Company's hedging
2 program until December 1999. Over the next four (4) years I served as Supervisor
3 of Gas Accounting and Regulatory for SCPC, and in 2003, I moved to my current
4 position.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The purpose of my testimony is to discuss with the Public Service
7 Commission of South Carolina ("Commission") SCPC's hedging program, including
8 the program's objectives and results.

9 **Q. PLEASE EXPLAIN THE HEDGING PROGRAM IMPLEMENTED BY**
10 **SCPC DURING ITS EXISTENCE AS AN INTRASTATE PIPELINE.**

11 A. In order to explain hedging fully it is necessary to first discuss the market in
12 which SCPC competed for its natural gas supplies during the Review Period. The
13 natural gas market is an unregulated, open market that is both dynamic and
14 extremely volatile. Because natural gas is an unregulated commodity, the forces
15 of supply and demand largely determine natural gas prices; therefore, natural gas
16 prices can rise and fall rapidly without much notice to gas buyers. Recognizing
17 the volatile nature and dynamic tendencies of the natural gas market, SCPC
18 implemented a hedging program in 1995, with Commission approval, in order to
19 mitigate the impacts of price volatility.

20 To illustrate the volatility of natural gas prices, it is helpful to review the
21 range of gas prices that the market has experienced since December 2002. Over the
22 past four years, natural gas prices have risen and fallen dramatically, trading

1 anywhere between \$4.50 to nearly \$16.00 per dekatherm ("Dt"), and this trend of
2 rising and falling prices continued into and during the Review Period. For
3 example, natural gas prices began 2005 at \$5.79 and moved higher, reaching \$7.90
4 by April 4. From there, prices dropped to \$6.03 by May 26. Shortly thereafter,
5 hot summer temperatures were present and a record-breaking hurricane season,
6 which included Hurricanes Katrina and Rita, soon followed. This combination of
7 weather related events spurred prices to new highs, reaching \$14.75 on October 5,
8 2005, just a couple of weeks after Rita blew through the Gulf. Prices then
9 retreated falling to \$10.88 before an early winter cold caused prices to peak at
10 \$15.78 on December 13. A very warm last half of December brought prices back
11 down to \$10.88 on the last trading day of 2005.

12 At the beginning of the Review Period, prices continued to decline. By the
13 end of January 2006, prices had fallen to \$8.40 per Dt due to much warmer than
14 normal weather which reduced demand. As it became clear that winter would end
15 with natural gas storage levels much higher than normal because of the warm last
16 half of winter, prices continued to drift lower, setting a first quarter low of \$6.45
17 on March 8, 2006. Over the next few months prices continued to move slowly
18 lower because the high storage levels and overall mild weather had reduced
19 demand. For example, in April a warm spell resulted in a leap in prices of \$1.63
20 in a matter of four days only to give over 90% of that move back over the next
21 seven days as temperatures moderated. With the memories of Hurricanes Ivan,
22 Katrina and Rita still fresh in the mind of market participants, the threat from

1 tropical storms kept prices high. In early June a tropical storm moved through the
2 Gulf, and although there was no damage to production facilities and production
3 was not interrupted, the market price increased by \$1.28 in a matter of days only
4 to fall back again and set a low of \$5.47 during the first week in July. After this
5 low was set, a few weeks of warmer than normal weather caused the first ever
6 summertime net national withdrawals of natural gas from storage. This, coupled
7 with the worries over tropical storms, resulted in an increase of over \$3.00 during
8 the month of July. At this point, the weather moderated, allowing normal
9 injections to continue. With the dire predictions of an active hurricane season
10 proving incorrect, the market relaxed and prices began to fall, culminating in a low
11 market price of \$4.07 on September 27. The last month of the Review Period saw
12 the market experience a pre-winter up tick with prices settling on the last day of
13 the Review Period at \$7.53 per Dt.

14 Because the price of natural gas is so volatile, SCPC, its customers and the
15 industry at large was constantly faced with the exposure of extreme price changes
16 in a relatively short period of time. This risk created the potential for unexpected
17 price increases for the Company's customers that in turn could have led to (i)
18 social and economic costs associated with higher utility bills; and (ii) alternative
19 fuel use and declining use per customer.

20 SCPC's hedging program was purely a financial program that allowed the
21 Company to lock in gas prices, thereby providing price protection against natural gas
22 price increases. Specifically, SCPC's hedging program used historical consumption

1 data to determine SCPC's exposure to price volatility in the market and then
2 employed the use of financial instruments to reduce or mitigate the Company's
3 exposure to this market risk in a reasonable and disciplined manner.

4 **Q. WHY DID SCPC BEGIN ITS HEDGING PROGRAM?**

5 A. SCPC began its hedging program to utilize additional tools available in the
6 public market to help stabilize the price SCPC, and ultimately its customers, paid for
7 natural gas. Over time the pricing of natural gas has undergone significant changes,
8 from the long-term, low cost contracts of the industry's early years, to the long-term
9 take-or-pay price contracts of the 1970s and 1980s, to the current practice of
10 acquiring gas supplies largely through short-term contracts at current market, or
11 "spot" prices. The reliance upon gas supplies based upon "spot market" prices
12 sharply undermines the ability to anticipate, plan for and control changes in gas
13 prices. As a result, many gas utilities have undertaken activities designed to
14 minimize the impact of price volatility. Price volatility is mitigated through the
15 purchase or sale of financial contracts that have been made available through
16 financial markets such as the New York Mercantile Exchange ("NYMEX"), a
17 nationally recognized market which, among other things, facilitates transactions for
18 the purchase and sale of natural gas and financial instruments related thereto.

19 **Q. DESCRIBE THE PRIMARY GOAL OF THE HEDGING PROGRAM.**

20 A. The primary goal of the program, as originally implemented, was to mitigate
21 price volatility through the purchase of gas financial instruments at the average
22 market price over the long term. Since inception of the hedging program, SCPC has

1 consistently managed the program in a manner designed to achieve this goal over the
2 long term, under prudent management and with the approval of the Commission.

3 **Q. WAS THERE A LIMIT AS TO HOW MUCH THE COMPANY COULD**
4 **HEDGE?**

5 A. Yes. By Commission Order No. 95-1253, the Commission approved a pilot
6 hedging program for SCPC, which allowed the Company to hedge up to thirty
7 percent (30%) of the system supply. Since 1995, however, there have been several
8 changes in the volumes that SCPC was allowed to hedge. For the first five (5)
9 months of the program, SCPC was allowed to hedge up to thirty percent (30%) of the
10 system supply. Based upon the early performance of the program, the Commission
11 allowed an increase to this volume up to sixty percent (60%), and in July 1997, the
12 Commission approved another increase in the amount allowed under the plan up to
13 seventy-five percent (75%) of system supply.

14 Although the Company was authorized to hedge up to seventy-five percent
15 (75%) of system supply, in practice SCPC only hedged up to seventy-five percent
16 (75%) of its estimated gas purchases for firm customers, which is derived by
17 averaging the firm purchases for the previous three years. This practice was in
18 effect during the Review Period and formally adopted by the Commission in Order
19 No. 1999-712, wherein the Commission authorized SCPC to continue operating its
20 hedging program at the approved level of up to seventy-five (75%) of estimated
21 gas purchases for firm customers. The Company carefully complied with this
22 volume limit during the Review Period.

1 **Q. DID SCPC ALWAYS HEDGE THE FULL VOLUMES THAT IT WAS**
2 **AUTHORIZED TO HEDGE?**

3 A. No. The model employed by SCPC for use within its hedging program was
4 used as a guide for management and a decision-making tool to assist the Company in
5 making financial hedging decisions and otherwise manage the hedging program. At
6 times, the model may have indicated that the level of hedging should be below the
7 authorized level of seventy-five percent (75%). Moreover, the Risk Management
8 Committee in an exercise of its oversight responsibilities could have decided to
9 implement hedges at levels lower than seventy-five percent (75%) based upon many
10 factors including, but not limited to, market analysis, consultation with the developer
11 of the model, consultation with other market participants, and other publicly and
12 privately available information.

13 **Q. WHAT MODEL DID SCPC USE TO CONDUCT ITS HEDGING**
14 **PROGRAM?**

15 A. As a refinement to the hedging program originally instituted in 1995, SCPC
16 adopted in July 1997 a statistics-based system that defined opportunities to lock in
17 prices (through the purchase of futures contracts) as well as to purchase price
18 protection (in the form of call options). This system is known as The Kase
19 HedgeModelTM and was developed by Kase and Company, Inc., a nationally
20 recognized risk management advisory firm specializing in the energy markets. The
21 first month's trading that was conducted using the Kase HedgeModelTM occurred in

1 February 1998 and was relied upon as one of the tools used in SCPC's hedging
2 program since that time.

3 **Q. WHY DID SCPC EMPLOY THE USE OF THE Kase HedgeModel™?**

4 A. The Kase HedgeModel™ was one of the tools that the Company used to
5 attempt to stabilize SCPC's price of gas by locking in purchases of futures at prices
6 that statistical analysis indicated may be low compared to market prices. It also
7 protected SCPC's customers from extremely high prices by recommending the
8 purchase of call options should the market threaten a run to higher prices. Further,
9 the Kase HedgeModel™ focused on long-term opportunities and reduced the risk of
10 extreme prices that SCPC's customers would have had to pay for natural gas.

11 **Q. HOW DID THE Kase HedgeModel™ FUNCTION TO ACHIEVE THE**
12 **HEDGING PROGRAM'S GOALS?**

13 A. As stated earlier in this testimony, the primary goal of the hedging program
14 was to mitigate price volatility through the purchase of gas financial instruments at
15 the average market price over the long term. The Kase HedgeModel™ functioned to
16 assist management to achieve this goal by accomplishing two primary financial
17 objectives: (i) lock-in low prices which have a high probability of increasing over
18 the long run; and (ii) purchase price protection when prices are rising or threatening
19 to rise in periods of uncertainty, in order to protect against extreme high price levels.

1 **Q. HOW DID SCPC ADMINISTER THE HEDGING PROGRAM ON A DAILY**
2 **BASIS?**

3 A. In order to conduct the hedging program, much market research and analysis
4 was necessary. SCPC received market information from a variety of sources
5 including: (i) three different daily outlooks from brokers, (ii) a weekly publication
6 from Kase and Company, Inc., and (iii) a quarterly publication from Kase and
7 Company, Inc., which also updated the Kase HedgeModel™ software. All of the
8 above sources of information were largely based on technical analysis of the natural
9 gas market.

10 In addition to its analysis of the periodicals stated above, SCPC also
11 participated in a weekly conference call with Kase and Company, Inc. Moreover,
12 SCPC received real-time market data via satellite to a computer located in my office.
13 This computer contains software that graphed the data and applied technical
14 indicators.

15 A review of the market fundamentals was also necessary to prepare for the
16 market day. This was done by a review of journals such as *Gas Daily*, *Inside*
17 *F.E.R.C.*, *Hart's Energy Markets*, and *E.I.A. Natural Gas Storage Report*. It was my
18 job each day to take this information, coupled with the strict guidelines set forth in
19 the hedging program, and make financial trading decisions based on all of the data,
20 both technical and fundamental. It should be emphasized that the hedging program
21 was not used to purchase SCPC's physical supply of gas. Accordingly, prior to the

1 expiration of financial instruments each month, SCPC sold that month's open
2 positions so that physical delivery of the commodity was never effectuated.

3 SCANA's Risk Management Committee ("RMC") established the goals and
4 objectives of the program, insured that these goals were executed in a disciplined and
5 consistent manner and required audits to ensure compliance with the program. The
6 results of the program were reported monthly to the RMC, which monitored the
7 program to ensure that the rules of the program were consistently followed and
8 applied. SCANA also had risk management compliance personnel who
9 independently reviewed the trades daily and verified that they complied with the
10 guidelines of the program.

11 **Q. HOW DID SCPC MEASURE THE PERFORMANCE OF THE HEDGING**
12 **PROGRAM?**

13 A. Since the inception of the hedging program, SCPC reported results measured
14 against a benchmark, in this case the average market price of natural gas. For
15 purposes of the hedging program, the average market price is defined as the simple
16 average of the NYMEX settle price while the given month is the closest nearby
17 being traded. During the Review Period a majority of the positions were purchased
18 with the objective of protecting against a run to very high prices. The result was that
19 the average hedging purchase price realized was less than the average NYMEX
20 market price realized during this PGA period and resulted in gas hedges that were
21 lower than the average NYMEX market price.

1 **Q. WHAT HAS BEEN THE EFFECT OF THE HEDGING PROGRAM ON THE**
2 **WEIGHTED AVERAGE COST OF GAS?**

3 A. During the ten months ending October 31, 2006, the hedging program
4 added \$1,394,651 to the Weighted Average Cost of Gas ("WACOG"). Since
5 inception of the program in 1995, the hedging program added \$6,186,851 to the
6 WACOG through October 31, 2006, or approximately \$0.0178 per Dt. Exhibit
7 No. ____ (JSB-1) shows the results since inception of the program, and Exhibit
8 No. ____ (JSB-2) shows the results on a per dekatherm basis since inception of the
9 program. However, it is important to remember that the primary goal of SCPC's
10 hedging program was to mitigate price volatility through the purchase of gas
11 financial instruments at the average market price over the long term; a goal that
12 SCPC achieved.

13 **Q. WHAT STEPS DID SCPC TAKE TO CONCLUDE ITS HEDGING**
14 **PROGRAM IN LIGHT OF THE MERGER?**

15 A. During the Company's 2005 Annual Review of Purchased Gas
16 Adjustments, the Commission, in Order No. 2006-389, authorized SCPC to begin
17 winding down its hedging program in anticipation of its conversion to an interstate
18 transportation pipeline. Consequently, the last month SCPC hedged natural gas
19 purchases for its intrastate operations was September 30, 2006. In Docket No.
20 2006-144-G, SCPC and South Carolina Electric & Gas Company ("SCE&G")
21 jointly petitioned the Commission for authority to continue operating SCPC's
22 hedging program on a limited basis for the sole purpose of assigning all rights,

1 privileges, gains, losses and costs thereof to SCE&G. The Commission approved
2 this authority in its Order No. 2006-331 and SCPC continued operating the
3 hedging program on behalf of SCE&G until its transition to federal jurisdiction on
4 November 1, 2006.

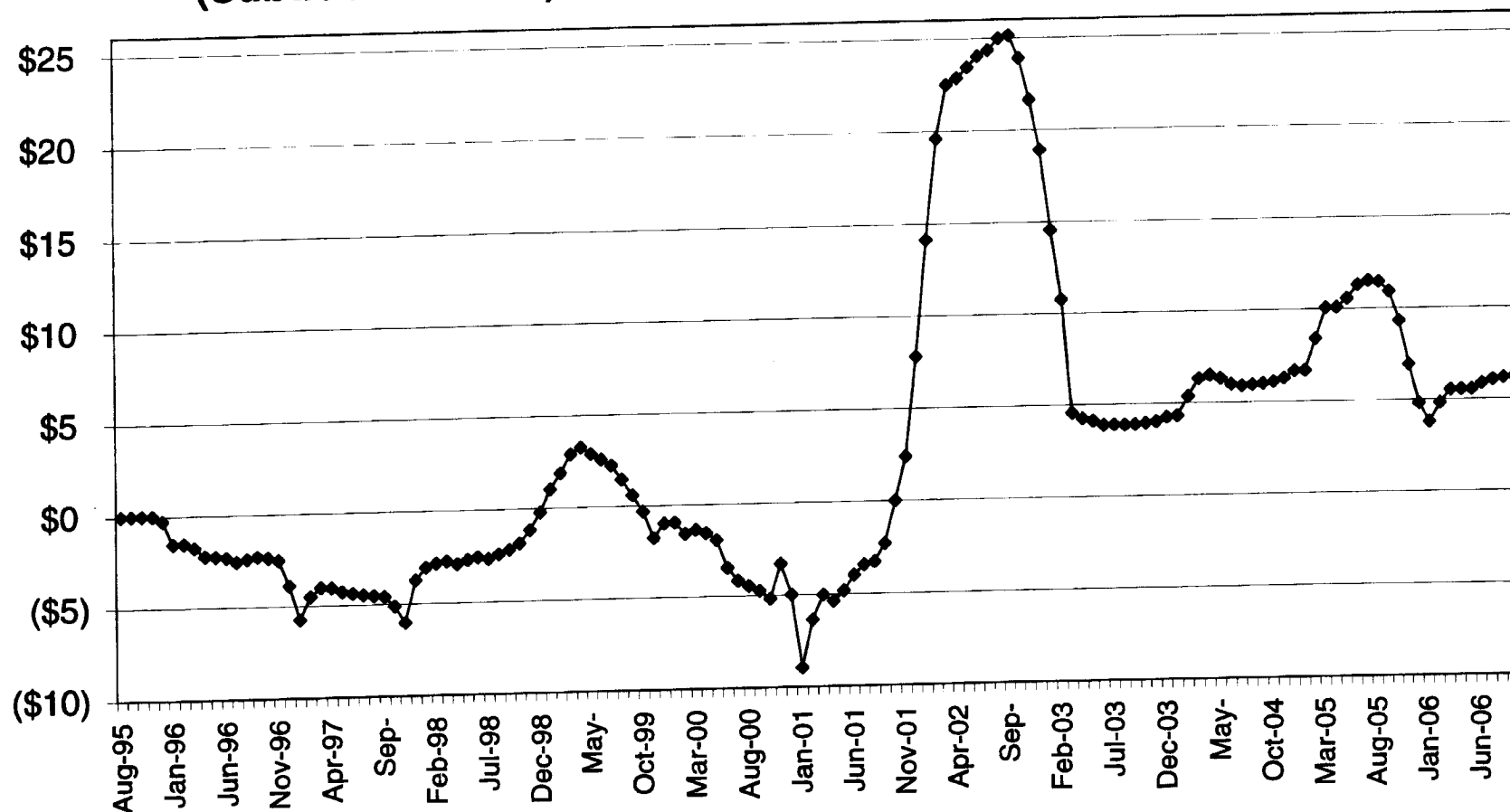
5 **Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS**
6 **PROCEEDING?**

7 A. On behalf of SCPC, I ask that the Commission find that SCPC operated its
8 hedging program in compliance with Commission orders and that SCPC's operation
9 of its hedging program during the Review Period was reasonable and prudent.

10 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 A. Yes.

**South Carolina Pipeline Corporation
Hedging Program
Cumulative Effect on the Cost of Gas
(Subtraction from) / Addition to the Cost of Gas (millions)**



South Carolina Pipeline Corporation **Cumulative Effect of Hedging Program** **Dollars per Dekatherm**

